

OKA-0003
(85424-0003)



09/551,537

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the Patent Application of

Kazuki SUZAWA, et al.

Serial No. 09/551,537

Filed: **April 18, 2000**

For: **PROCESS FOR PRODUCING OPTICAL RECORDING MEDIUM AND OPTICAL RECORDING MEDIUM**

Group Art Unit: 1744

Examiner: Lawrence D. Ferguson

BOX AF
Commissioner for Patents
Washington, DC 20231

RECEIVED

JUL 25 2002

TRANSMITTAL OF APPEAL BRIEF **TC 1700**

Sir:

Three copies of Appellant's Brief on Appeal for the above-referenced application are being filed herewith. The Commissioner is hereby authorized to charge the requisite fee(s) under 37 C.F.R. 1.16 or 1.17, which may be required, or to credit any overpayment to Deposit Account 18-0013.

The Notice of Appeal for this application and Petition for Extension of Time are being filed concurrently herewith.

Respectfully submitted,

Robert S. Green
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DATE: July 23, 2002

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APPEAL BRIEF

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TC 1700

Sir:

This is an Appeal Brief under 37 C.F.R. 1.192 appealing the final decision of the Examiner dated March 11, 2002. Each of the topics required by 37 C.F.R. 1.192 is presented herewith and is labeled appropriately.

I. Real Party in Interest

TDK Corporation of Tokyo, Japan ("TDK") is the real parties in interest of the present application. An assignment of all rights in the present application to TDK was executed by the inventors and recorded by the U.S. Patent and Trademark Office at reel 010734, frame 0548.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of Claims

Claims 1-5 stand finally rejected. No claims have been amended. No claims are currently allowed.

Accordingly, the Appellants hereby appeals the final rejection of claims 1-5, which are presented in the Appendix.

IV. Status of Amendments

An Amendment was filed subsequent to the first rejection of October 2, 2001 (Paper No. 3). No Amendment after the Final Rejection that is the subject of this Appeal was filed.

The claims in the Appendix represent the state of the claims as pending.

V. Summary of the Invention

The invention relates to an optical recording medium having high weatherability that can be produced when no drying step is performed after an organic dye layer is formed by a spin coating method. In this structure of the optical recording medium, an organic dye recording layer, which serves to record and reproduce using laser light is formed on a light-transmittable substrate formed with a pregroove. A reflecting layer increasing light-reflectance is formed on the organic dye recording layer. A protective layer which protects the organic dye recording layer is formed on the reflecting layer.

The optical recording medium contains an organic solvent in an organic dye layer in an amount of 2% to 15% by weight based on the organic dye. The process for producing the optical recording medium comprises preparing a solution by dissolving the organic dye in the organic solvent, applying the solution onto a light-transmittable

substrate by a spin coating method to form an organic dye layer, and thereafter forming a reflecting layer on the organic dye layer without performing a drying treatment of the organic solvent left in the organic dye layer and further forming a protective layer on the reflecting layer.

VI. Issues

The issue presented for consideration in this appeal is as follows:

- (1) Whether the Examiner erred in rejecting claims 1 and 3-4 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,952,073 to Hurditch et al.?
- (2) Whether the Examiner erred in rejecting claims 2 and 5 under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,952,073 to Hurditch et al. in view of U.S. Patent No. 5,547,728 to Cunningham et al.?

VII. Grouping of Claims

Claim 1 stands or falls alone with respect to the §102 rejections over Hurditch et al. '073.

Claims 3-4 stand or fall together with respect to the §102 rejections over Hurditch et al. '073.

Claim 2 stands or falls alone with respect to the §103 rejections over Hurditch et al. '073 in view of Cunningham et al. '728.

Claim 5 stands or falls alone with respect to the §103 rejections over Hurditch et al. '073 in view of Cunningham et al. '728.

VIII. Arguments

In the Final Office Action of March 11, 2002, the following rejections were presented by the Examiner:

(i) 35 U.S.C. §102

(1) The examiner rejected claims 1 and 3-4 under 35 U.S.C. §102(e) as allegedly being anticipated over Hurditch et al. '073.

(ii) 35 U.S.C. §103

(1) The Examiner rejected claims 2 and 5 under 35 U.S.C. §103(a) as allegedly being obvious over Hurditch et al. '073 in view of Cunningham et al. '728.

(iii) Other

None

For at least the following reasons, Appellant submits that these rejections are both technically and legally unsound and should therefore be reversed.

(i) 35 U.S.C. §102

The examiner rejected claims 1 and 3-4 under 35 U.S.C. §102(e) as allegedly being anticipated over Hurditch et al. '073

Claim 1 recites a process for producing an optical recording medium containing an organic solvent in an organic dye layer in an amount of 2% to 15% by weight based on an organic dye. The process comprises applying a solution, prepared by dissolving the organic dye in the organic solvent, onto a light-transmittable substrate by a spin coating method to form the organic dye layer. Thereafter, a reflecting layer is formed on the organic dye layer without performing a drying treatment of the organic solvent left in the organic dye layer, and further forming a protective layer on the reflecting layer. In this manner, solvent contained in the organic dye layer is not removed via a drying step.

Claim 3 recites an optical recording medium having an organic dye layer, a reflecting layer and a protective layer in this order on a light-transmittable substrate. The optical recording medium contains an organic solvent in the organic dye layer in an amount of 2% to 15% by weight based on an organic dye.

It should be noted that both claims 1 and 3 recite that the organic solvent is contained in the organic dye layer in an amount of 2% to 15% by weight based on the organic dye.

Hurditch et al. '073 discloses a dye composition for use in optical recording media. All the layers recited in claim 1 are allegedly presented in this reference at col. 7, lines 10-16. The final Office Action, referring to paragraph 5 of the non-final Office Action of October 2, 2001 alleges that drying of the solvent is optional, referring in the reference where "After spin coating, the dye layer may be optionally dried to further remove residual solvent...." See col. 11, lines 9-10. Appellants disagree with this characterization of the reference.

Hurditch et al. '073 at col. 11, lines 9-10 states that "the dye layer may be optionally dried to further remove residual solvent..." (emphasis added). When taken in context of the specification, this means that the solvent is removed from the applied dye layer under ambient conditions, or that removal of the solvent may be accelerated by additional drying. By stating that the drying is "additional," the reference is stating unequivocally that the "additional drying" (further remove) is in addition to any drying that is already occurring or has already occurred. Furthermore, there is no indication in this reference that the reflective layer is applied to a dye layer whereby no drying step has occurred on the dye layer. That is, Hurditch et al. '073 does not disclose, teach or suggest the absence of a drying step.

Still further, the Office Actions allege that Hurditch et al. '073 "discloses the recording layer is formed by dissolving the dye mixture in a coating solvent at 2-10% by weight of the total components in the solution." Office Action of October 2, 2001 at page 3, lines 2-4, referring to Hurditch et al. '073 col. 10, lines 26-29. This is a misleading interpretation, as Hurditch et al. '073 discloses a concentration of the total solid component in the coating solution for forming the recording layer. This is distinct from a content of the organic solvent in the organic dye layer recited in claims 1 and 3.

Accordingly, Hurditch et al. '073 fails to disclose, teach or suggest a content of the organic solvent in the organic dye layer.

A document can only anticipate a claim if the document discloses, explicitly or implicitly, each and every feature recited in the claim. Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Hurditch et al. '073 fails to disclose, either explicitly or implicitly, at least the above-noted feature recited in independent claim 1, Hurditch et al. '073 cannot anticipate the claim. At least in view of the foregoing, claim 1 is allowable, and the rejection should not be sustained.

The Office Action (March 11, 2002) at paragraph 7 acknowledges that, in Hurditch et al. '073 "the dye layer may be optionally dried," and alleges that the Applicants are "reading into what the reference is implying." However, it is the Examiner who is misreading the reference for what it states by taking a portion of Hurditch et al. '073 out of context. The reference SPECIFICALLY STATES at col. 11, lines 9-10 states that "the dye layer may be optionally dried to further remove residual solvent..." (emphasis added). This language is clear on its face, and the Examiner cannot ignore this sentence for what it discloses, teaches or suggests. Contrary to what the Examiner believes, this sentence DOES NOT MEAN "that the layer does not have to be dried." Final Office Action at paragraph 7, lines 6-7.

The Examiner further alleges that in paragraph 7 of the final Office Action that "Hurditch et al. '073 discloses the recording layer is formed by dissolving the dye mixture in a coating solvent and teaches organic solvents for use with the dye mixtures which teaches a content of the organic solvent in the organic dye layer." However, this is not what Appellants are claiming, and this is distinct from a content of the organic solvent in the organic dye layer recited in claims 1 and 3. That is, claim 1 recites a process for producing an optical recording medium containing an organic solvent in an organic dye layer in an amount of 2% to 15% by weight based on an organic dye. Since the final Office Action does not allege that Hurditch et al. '073 disclose,

teach or suggest the claimed percentages of components, this is considered an admission by the Examiner that this rejection is deficient, and a *prima facie* case of anticipation has not been made.

Accordingly, for all the reasons discussed above, this rejection should not be sustained.

Claim 4, being dependent upon claim 3, is also allowable for the reasons above. Moreover, this claim is further distinguished by the materials recited therein, particularly within the claimed combination. Accordingly, for all the reasons discussed above, this rejection should not be sustained.

(i) 35 U.S.C. §103

The Examiner rejected claims 2 and 5 are rejected under 35 U.S.C §103(a) as allegedly being obvious over Hurditch et al. '073 in view of U.S. Patent No. 5,547,728 to Cunningham et al. Appellants respectfully traverse this rejection.

Cunningham et al. '728 is applied solely for the proposition that the solvent can be 2,2,3,3-tetraflouro-1-propanol. Cunningham et al. '728 does not make up for the deficiencies of Hurditch et al. '073, discussed above. Still further, Cunningham et al. '728 does not disclose, teach or suggest an optical recording medium having an organic dye layer, a reflecting layer and a protective layer in this order on a light-transmittable substrate, or that the optical recording medium contains an organic solvent in the organic dye layer in an amount of 2% to 15% by weight based on an organic dye, in such a way that would make up for the deficiencies of Hurditch et al. '073. Accordingly, a *prima facie* case of obviousness has not been established, and the rejection should not be sustained.

Furthermore, claim 2, being a process claim dependent upon claim 1, and claim 5, being a product claim dependent upon claims 3 or 4, are also allowable for the reasons above. Moreover, these claims are further distinguished by the materials recited therein, particularly within the claimed combination. Accordingly, all §103 rejections should not be sustained.

(iii) **Other**

None

IX. Conclusion

In view of the foregoing reasons, Appellant submits that the final rejection of claims 1-5 is improper and should not be sustained. Therefore, a reversal of the Final Rejection of March 11, 2002, as to claims 1-5, is respectfully requested.

Respectfully submitted,



Date: July 23, 2002

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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 180013 for any such fees, and applicant(s) hereby petition for any needed extension of time.

X. Appendix
Claims on Appeal

1. A process for producing an optical recording medium containing an organic solvent in an organic dye layer in an amount of 2 to 15% by weight based on an organic dye, the process comprising applying a solution, prepared by dissolving the organic dye in the organic solvent, onto a light-transmittable substrate by a spin coating method to form the organic dye layer, thereafter forming a reflecting layer on the organic dye layer without performing a drying treatment of the organic solvent left in the organic dye layer and further forming a protective layer on the reflecting layer.
2. A process for producing an optical recording medium according to Claim 1, wherein the spin coating is performed at a rotating speed of 3500 rpm or more in the formation of the organic dye layer.
3. An optical recording medium having an organic dye layer, a reflecting layer and a protective layer in this order on a light-transmittable substrate, the optical recording medium containing an organic solvent in the organic dye layer in an amount of 2 to 15% by weight based on an organic dye.
4. An optical recording medium according to Claim 3, wherein said organic solvent is at least one member selected from fluorinated alcohols having a boiling point of 60°C or more, 2-ethoxyethanol and diacetone alcohol.
5. An optical recording medium according to Claim 3 or 4, wherein said organic solvent is mainly 2,2,3,3-tetrafluoro-1-propanol.